Attorney Docket: 10908/7 U.S. Serial No. 10/734,090

Title: Solvent Extraction Mixture Comprising Substituted Imidazole or Benzimidazole for the Purification of Groups of Base Metals



FIG.I

BASIC SOLVENT EXTRACTION FLOW SHEET

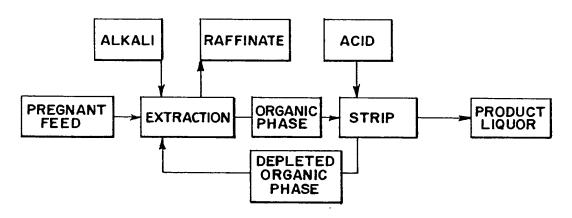
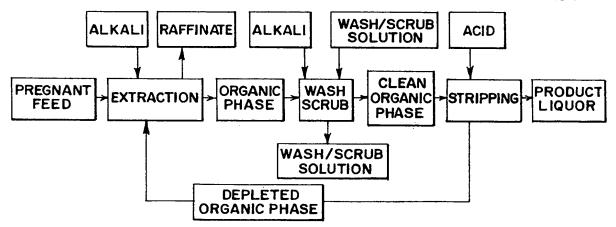


FIG.2

SOLVENT EXTRACTION FLOW SHEET WITH WASH/SCRUB SECTION



Attorney Docket: 10908/7 U.S. Serial No. 10/734,090

FIG.3 SOLVENT EXTRACTION FLOW SHEET WITH SECOND STRIP STAGE (DIFFERENTIAL STRIPPING)

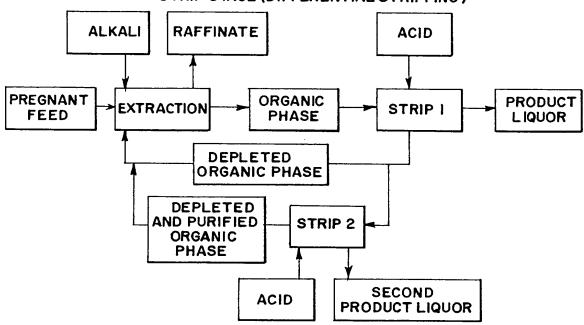
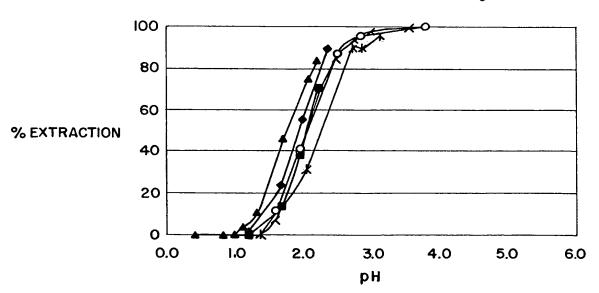


FIG.4 EXTRACTION OF INDIVIDUAL METAL IONS WITH DNNS

CO - Ni - Cu - Zn - Mg - Mn



Attorney Docket: 10908/7 U.S. Serial No. 10/734,090

FIG.5 EXTRACTION OF INDIVIDUAL METALS WITH BADI

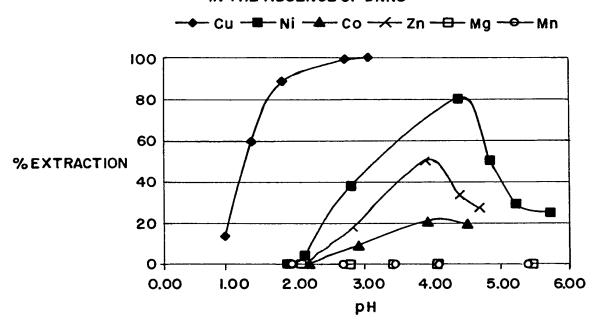
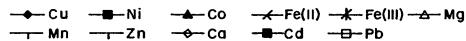
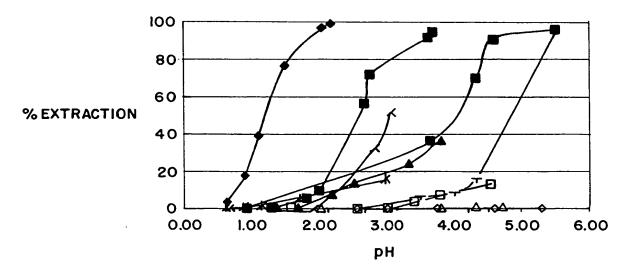


FIG.6 EXTRACTION OF INDIVIDUAL METALS WITH A MIXTURE OF BADI AND DNNS





Attorney Docket: 10908/7 U.S. Serial No. 10/734,090 Title: Solvent Extraction Mixture Comprising Substituted Imidazole or Benzimidazole for the Purification of Groups of Base Metals

FIG. 7d EXTRACTION OF METALS FROM A MIXED AQUEOUS SOLUTION WITH BADI/DNNS (0.57 MOLAR BADI/O.14 MOLAR DNNS)

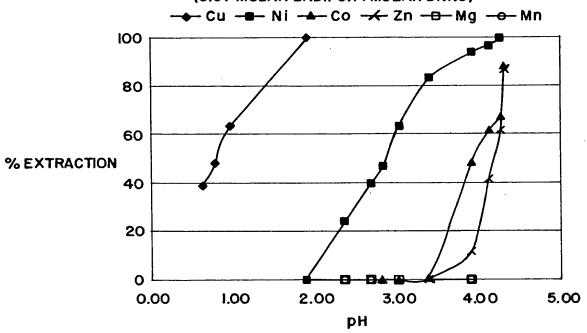
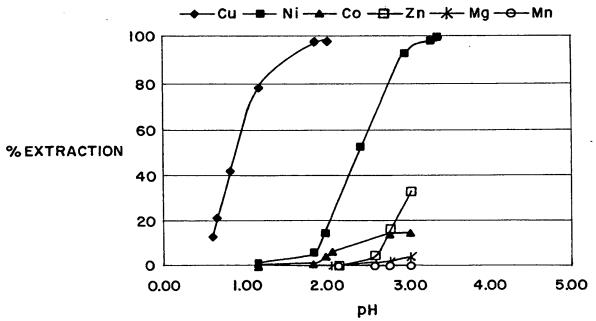


FIG. 7b EXTRACTION OF METALS FROM A MIXED AQUEOUS SOLUTION WITH BADI/DNNS (1.14 MOLAR BADI/0.28 MOLAR DNNS)



Title: Solvent Extraction Mixture Comprising Substituted
Imidazole or Benzimidazole for the Purification of
Groups of Base Metals

Attorney Docket: 10908/7 U.S. Serial No. 10/734,090

FIG.8 EXTRACTION OF NICKEL BY BADI; INFLUENCE OF DNNS CONCENTRATION

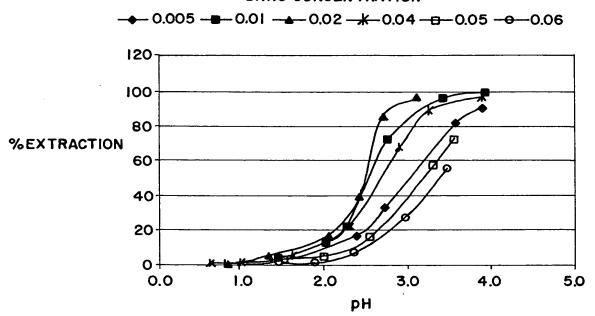
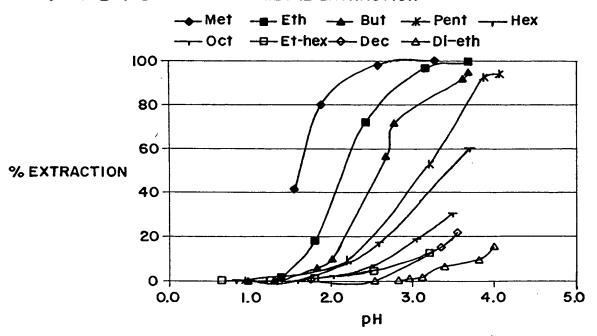


FIG.9 EFFECT OF AMINO OF R-ADI SUBSTITUENT ON METAL EXTRACTION



Attorney Docket: 10908/7 U.S. Serial No. 10/734,090 Title: Solvent Extraction Mixture Comprising Substituted Imidazole or Benzimidazole for the Purification of Groups of Base Metals

FIG. O EXTRACTION OF METAL IONS WITH BADI/DNNS IN THE PRESENCE OF 0.77 MOLAR CHLORIDE

